

a) Claim Rejections Based On 35 U.S.C. §102(e)

The rejection of Claims 53 and 56-58 under 35 U.S.C. §102(e) as anticipated by U.S. Patent 6,328,723 to Burns, Jr., et al. is respectfully traversed. The Examiner misinterpreted Burns, Jr., et al. throughout the Office Action, as describing a “biodegradable sanitary napkin composite.” Nowhere in the specification, claims, or drawings of Burns, Jr., et al., is there any disclosure or suggestion of a sanitary napkin composite which is biodegradable.

Applicants’ specification provides a specific definition of “biodegradable,” and a specific test for determining whether or not a material is biodegradable (paragraph traversing pp. 3-4 and pp. 6-7). Examples of biodegradable thermoplastic polymers include polylactic acid polymers; certain polyester terpolymers of butanediol, adipic acid, succinic acid and/or terephthalic acid; polycaprolactone polymers; and combinations thereof (pp. 9-10). Most thermoplastic polymers, including conventional polyolefins (e.g., polyethylene and polypropylene) and conventional polyesters (e.g., polyethylene terephthalate and polybutylene terephthalate) are not biodegradable and do not constitute “biodegradable thermoplastic polymers” as recited in Claim 53.

Independent Claim 53 (from which Claims 56-58 depend) is directed to a breathable laminate. The laminate includes a breathable film having one to three layers, in which each film layer includes a biodegradable thermoplastic polymer; and a fibrous nonwoven web including a biodegradable thermoplastic polymer.

Burns, Jr., et al. discloses a sanitary napkin including a topsheet, a backsheet and an absorbent core between them. The backsheet includes two layers, namely a relatively thick apertured layer 40A and a relatively thin breathable microporous layer 40B (Fig. 3; Col. 6, lines 11-65). The topsheet may include a nonwoven web, and is laminated to the backsheet along the edges of the garment.

When the topsheet is formed of a nonwoven material, it may include natural fibers (e.g., wood or cotton), synthetic fibers (e.g., polymeric fibers formed of polyester, polypropylene or polyethylene) or combinations thereof (Col. 5, lines 40-45). None of these materials is both thermoplastic and biodegradable as required by

Applicants' Claim 50. Wood and cotton are not thermoplastic. Polyester, polypropylene and polyethylene are not biodegradable. The term "polyester" when used alone (without identifying a specific polymer) is generally understood to mean polyethylene terephthalate or polybutylene terephthalate, which are conventional polyesters. These polymers are not biodegradable.

No list of polymers is disclosed for the first (apertured) film layer 40A (Col. 6, lines 11-31). Accordingly, no biodegradable thermoplastic polymers are disclosed.

The second film layer 40B is formed from a mixture of thermoplastic polymer and filler. Suitable thermoplastic polymers include polyolefins, polyester, polyurethanes, compostable or biodegradable polymers, thermoplastic elastomers, and metallocene-catalyzed polymers. Of the numerous polymers disclosed, only one group is "compostable or biodegradable."

In summary, Burns, Jr., et al. does not disclose a breathable laminate in which each film layer, and the fibrous nonwoven web layer, includes a biodegradable thermoplastic polymer. Burns, Jr., et al. does not anticipate any of Claims 53 or 56-58.

Furthermore, Claim 56 requires the film to include a second layer including filler particles, and voids formed around the filler particles. Burns, Jr., et al. does not disclose a second film layer meeting these limitations, and does not anticipate Claim 56 for this additional reason.

b) Claim Rejections Based On 35 U.S.C. §103(a)

The rejection of Claims 21-26, 31, 35, 38-42, 44-47 and 50-54 under 35 U.S.C. §103(a) as obvious over Burns, Jr., et al. in view of U.S. Patent 5,340,646 (Morita et al.) is respectfully traversed.

Independent Claim 21 (from which Claims 22-26, 35, 38-42 and 44-47 depend) recites a breathable laminate comprising a breathable, stretch-thinned film in which each film layer includes a biodegradable thermoplastic polymer; and a fibrous nonwoven web including a biodegradable thermoplastic polymer. These features are also

recited in independent Claim 53, discussed above. Accordingly, the features presented above which distinguish Claim 53 over Burns, Jr., et al., are also applicable to Claim 21.

Additionally, Claim 21 requires that one film layer includes a mixture of filler particles and biodegradable thermoplastic polymer and constitutes 50-100% of the thickness of the film. Burns, Jr., et al. does not disclose or suggest this feature. As shown in Fig. 3 of Burns, Jr., et al., the apertured film layer 40A (which does not include a filler or a biodegradable thermoplastic polymer) is substantially thicker than the breathable microporous film layer 40B, and constitutes more than 50% of the film thickness.

In summary, as to Claim 21, Burns, Jr., et al. does not disclose a breathable laminate in which each film layer, and the fibrous nonwoven layer, includes a biodegradable thermoplastic polymer. Burns, Jr., et al. also does not disclose a breathable film in which one film layer includes a mixture of filler particles and biodegradable thermoplastic polymer and constitutes 50-100% of the thickness of the film.

Independent Claim 50 (from which Claims 51 and 52 depend) recites a breathable laminate comprising a breathable, stretch-thinned film in which each film layer includes a biodegradable thermoplastic polymer; and a fibrous nonwoven web including a biodegradable thermoplastic polymer. These features are also recited in independent Claim 53, discussed above. Accordingly, the features presented above which distinguish Claim 53 over Burns, Jr., et al. are also applicable to Claim 50.

Additionally, Claim 50 requires two adjacent film layers, each including a mixture of filler particles and biodegradable thermoplastic polymer and together constituting 50-100% of the film thickness. Burns, Jr., et al. does not disclose or suggest these features. Referring to Fig. 3 of Burns, Jr., et al., the apertured film layer 40A, which does not include a biodegradable thermoplastic polymer or filler particles, constitutes more than 50% of the film thickness. There is only one filled layer 40B, which may include a biodegradable thermoplastic polymer.

In summary, as to Claim 50, Burns, Jr., et al. does not disclose a breathable laminate in which each film layer, and the fibrous nonwoven layer, includes a biodegradable thermoplastic polymer. Burns, Jr., et al. also does not disclose a breathable

film in which two adjacent layers include a mixture of filler particles and biodegradable thermoplastic polymer.

Independent Claim 53 (from which Claim 54 depends) has already been discussed with respect to Burns, Jr., et al. As to Claim 53, Burns, Jr., et al. does not disclose a breathable laminate in which each film layer, and the fibrous nonwoven layer, includes a biodegradable thermoplastic polymer.

Morita et al. is cited as disclosing a specific biodegradable thermoplastic polymer, and does not otherwise disclose the claim limitations that are missing from the Burns, Jr., et al. disclosure. Accordingly, the combination of Burns, Jr., et al. and Morita et al. does not render obvious any of Claims 21-26, 31, 35, 38-42, 44-47 and 50-54.

The rejection of Claim 43 under 35 U.S.C. §103(a) as obvious over Burns, Jr., et al. in view of Morita et al., further in view of the article entitled “Beta-Cyclodextrin Molecules And Their Use In Breathable Barriers” (“Roberts”) is respectfully traversed. Claim 43 depends from Claim 21 and is patentable for at least the same reasons. The article by Roberts is cited as disclosing that cyclodextrins are useful in breathable barrier films. Accordingly, the combined references do not render Claim 43 obvious.

The rejections of Claims 21-26, 31, 35, 37-42, 44-52 and 54 under 35 U.S.C. §103(a) as obvious over Burns, Jr., et al. in view of U.S. Patent 6,028,160 (“Chandler ‘160”) or 6,156,929 (“Chandler ‘929”) is respectfully traversed. These claims are patentable over Burns, Jr., et al. for the reasons explained above. The secondary references (Chandler ‘160 and Chandler ‘929) are cited as disclosing specific biodegradable polymers, but do not otherwise disclose the claim limitations missing from the Burns, Jr. et al. disclosure. Accordingly, the combined references do not render obvious any of Claims 21-26, 31, 35, 37-42, 44-52 or 54.

c) Conclusion

Applicants respectfully submit that the claims are in condition for allowance. The Examiner should appreciate the shortcomings of these claim rejections. When a primary reference (Burns, Jr., et al.) discloses that one layer of a multilayer film, in a film/nonwoven laminate, may include a biodegradable polymer, it is too much of a

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“stretch” to infer that the reference teaches or suggests a laminate in which every film layer, and the nonwoven layer, includes a biodegradable polymer. Numerous independent claim limitations have been overlooked, and not addressed, in making these rejections. The secondary references disclose specific biodegradable polymers but do not supply the claim limitations missing from the primary reference.

If the Examiner detects any unresolved issues, then Applicants’ attorney requests a telephone call and a further telephone interview.

Respectfully submitted,



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